Listing of Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.(Currently Amended) A power transmission apparatus comprising:

an input rotational coupling to which power can be applied from a prime mover and an output rotational coupling by which power can be applied to a load;

at least two electric machines, ~~each~~ one of the electric machines ~~rotationally~~ connectable ~~relative~~ to one of the input rotational coupling and the output rotational coupling by independently controllable clutch devices, each of the electric machines being independently operable as a motor and as a generator;

an electric energy storage device coupled to the electric machines through a controller and operable to store and release electric energy;

first and second planetary gear sets respectively coupled to the electric machines;

a third planetary gear set having at least two sun gears, coupled to the output rotational coupling;

wherein the controller is coupled to operate the clutch devices and the electric machines in coordination so to obtain a plurality of operational ranges, the ranges differing by routing different subsets of input mechanical and electric power from the prime mover and the energy storage device into charging of the energy storage device and application of power to the output rotational coupling, and the two sun gears of the third planetary gear set are respectively coupleable by respective ones of the independently controllable clutch devices to planetary gear carriers of the first and second planetary gear sets.

2.(Canceled)

3.(Original) The power transmission apparatus of claim 1, wherein the input rotational coupling has a normal engine-wise rotational direction for advancing in a given direction, and wherein at least one of said electric machines is movable in the engine-wise direction

and in an anti-engine-wise direction during different operational conditions of the apparatus.

4.(Currently Amended) The power transmission apparatus of claim 1, wherein the electric machines comprise first and second motor/generators~~, each coupled respectively to a first and second planetary gear set~~.

5.(Canceled)

6.(Canceled)

7.(Currently Amended) The power transmission apparatus of claim [[6]] 1, wherein the third planetary gear ~~arrangement~~ set comprises one of a Ravigneaux gear set, a simple-compound gear set configuration, and a plural stage gear set.

8.(Currently Amended) The power transmission apparatus of claim 7, wherein the independently controllable clutch devices ~~comprises~~ selectively ~~operable rotational engagements between~~ connect the first planetary gear set ~~on one hand and on the other hand~~ to at least one of the input rotational coupling, a sun gear of the third planetary gear arrangement and a planetary carrier of said third planetary gear arrangement.

9.(Currently Amended) The power transmission apparatus of claim [[5]] 4, further comprising at least one controllable brake operable to fix an element of the third planetary gear ~~arrangement~~ set in at least one operational mode of the transmission.

10.(Currently Amended) The power transmission apparatus of claim 9, wherein the controller is operable for selectively operating the clutch devices and the brake in a plurality of operational modes including:

coupling one of the motor/generators to the input coupling during operation of the prime mover, and operating ~~said~~ one of the motor/generators as a generator for at least one of charging the energy storage device and providing electric power to an other of the motor/generators;

coupling at least one of the motor/generators as a motor to the output coupling for operation as a motor adding output power in addition to power from the prime mover under electric power from at least one of the energy storage device and an output of an other of the motor/generators;

coupling power from the prime mover to the output coupling exclusive of the motor/generators; and[[,]]

coupling the output coupling to at least one of the motor/generators for operation as a generator during regenerative braking.

11.(Original) The power transmission apparatus of claim 10, wherein the operational modes further comprise at least one of:

coupling one of the motor/generators to the input coupling during forward operation as a motor powered from the energy storage device, for starting the prime mover;

coupling one or both of the motor/generators to the output coupling exclusive of the input shaft, for high torque/low speed operation as a motor powered from the energy storage device;

coupling the motor/generators for operation in opposite rotational directions;

coupling at least one of the motor/generators to the output coupling for operation in reverse.

12.(Original) The power transmission apparatus of claim 10, wherein the controller is arranged to shift from one of said operational modes to another in effecting at least one shift for changing at least one of a torque/speed ratio and a charging/discharging condition among the motor/generators and the energy storage device.

13.(Currently Amended) The power transmission apparatus of claim 10, wherein the controller is arranged to effect said shift during one of no-load and synchronous operation of ~~the~~ elements of the clutch devices.

14.(Canceled)

15.(Currently Amended) The vehicle of claim [[14]] 21, wherein the transmission has an engine-wise direction corresponding to operation of the engine and wherein ~~the~~ at least one ~~motor/generator~~ of the electric machines is movable in an anti-engine-wise direction ~~in at least one of the~~ during the operational ~~modes~~ ranges of the transmission.

16.(Canceled)

17.(Canceled)

18.(Currently Amended) The vehicle of claim [[17]] 21, wherein the third planetary gear ~~arrangement~~ set comprises one of a of a Ravigneaux gear set with plural sun gears and a simple-compound gear set configuration.

19.(Canceled)

20.(Currently Amended) The vehicle of claim [[19]] 21, wherein ~~an input shaft of the transmission coupled to the engine,~~ the engine, the input rotational coupling, the output ~~shaft~~ rotational coupling ~~associated with the driving wheels~~, the ~~first and second motor/generators~~ electric machines and the first and second planetary ~~gears~~ gear sets are ~~all~~ coaxially aligned.

21.(New) A vehicle comprising:

an engine; and

a hybrid transmission coupled to the engine, the hybrid transmission comprising:

an input rotational coupling to which power can be applied from the engine and an output rotational coupling by which power can be applied to a load;

at least two electric machines, one of the electric machines connectable to one of the input rotational coupling and the output rotational coupling by independently controllable clutch devices, each of the electric machines being independently operable as a motor and as a generator;

an electric energy storage device coupled to the electric machines through a controller and operable to store and release electric energy;

first and second planetary gear sets respectively coupled to the electric machines;

a third planetary gear set having at least two sun gears, coupled to the output rotational coupling;

wherein the controller is coupled to operate the clutch devices and the electric machines in coordination so to obtain a plurality of operational ranges, the ranges differing by routing different subsets of input mechanical and electric power from the engine and the energy storage device into charging of the energy storage device and application of power to the output rotational coupling, and the two sun gears of the third planetary gear set are respectively coupleable by respective ones of the independently controllable clutch devices to planetary gear carriers of the first and second planetary gear sets.